



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

09/832,171

04/10/2001

Hitoshi Ota

U 013390-0

8787

7590

09/27/2004

Ladas & Parry
26 West 61 Street
New York, NY 10023

EXAMINER

SHOSHO, CALLIE E

ART UNIT

PAPER NUMBER

1714

DATE MAILED: 09/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/832,171

Applicant(s)

OTA ET AL.

Examiner

Callie E. Shosho

Art Unit

1714

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 07 September 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
(a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☒ they raise the issue of new matter (see Note below);
(c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: see attachment.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☒ Newly proposed or amended claim(s) 39-67 would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attachment.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☐ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____

Claim(s) objected to: 1-3,5-14,16-27 and 30-36.

Claim(s) rejected: 29.

Claim(s) withdrawn from consideration: _____

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☒ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4/2/04.
10. ☐ Other: _____

Callie E. Shosho
Primary Examiner
Art Unit: 1714

Attachment to Advisory Action

1. Applicants amendment filed 9/7/04 has been fully considered. However, the amendment has not been entered given that the amendment raises the issue of new matter.

Specifically, claim 1 has been amended to recite that the wetting agent is selected from the group consisting of acetylene glycols, acetylene alcohols, glycol ethers and “(C₄-C₁₀ alkyl) diols”. It is the examiner’s position that this phrase fails to satisfy the written description requirement under 35 USC 112, 1st paragraph since there does not appear to be a written description requirement of the phrase “(C₄-C₁₀ alkyl) diols” in the application as originally filed, *In re Wright*, 866 F.2d 422, 9 USPQ2d 1649 (Fed. Cir. 1989) and MPEP 2163.

As support for the recitation of “(C₄-C₁₀ alkyl) diols” applicants point to the paragraph bridging pages 28-29 of the present specification. While this portion of the specification provides support for the specific recitation of 1,2-(C₄-C₁₀ alkyl) diols, 1,3-(C₄-C₁₀ alkyl) diols, 1,5-(C₄-C₁₀ alkyl) diols, and 1,6-(C₄-C₁₀ alkyl) diols, this does not provide support for the broad recitation of (C₄-C₁₀ alkyl) diols. The recitation of “(C₄-C₁₀ alkyl) diols” encompasses (C₄-C₁₀ alkyl) diols other than those listed above such as 1,8-octanediol, 1,4-butanediol, 2,3-butanediol, etc. for which there is no support in the specification as originally filed.

Further, it is noted that even if the amendment were entered, claims 1-2, 5-14, 16-22, 27, 30-31, and 33-36 would not be allowable over EP 851005 in view of Takada et al. (U.S. 6,454,403) and claims 23-26 would not be allowable over EP 851005 in view of Takada et al. further in view of Fujimatsu et al. (U.S. 5,913,971).

As set forth in the office action mailed 6/1/04, EP 851005 discloses process for preparing pigment dispersion which comprises (a) pigment surface treatment step of introducing

hydrophilic group such as sulfonic group directly onto surface of the pigment in an amount of 10×10^{-6} equivalents or larger per g of pigment wherein the pigment includes CI Pigment Blue, Red, and Yellow, quinacridone pigments and phthalocyanine pigments, (b) dispersion step of dispersing surface treated pigment in admixture with wetting agent such as ethylene glycol and water, and (c) adding resin such as alkali-soluble resin for providing dispersability during the dispersion step to form pigment dispersion wherein the pigment dispersion comprises polyvalent metal ion such as calcium, magnesium, iron, and nickel in amount of up to 80 times the neutralization equivalent of the sulfonic acid groups contained per g of dispersion.

While EP 851005 discloses the use of ethylene glycol wetting agent, there is no disclosure of wetting agent as presently claimed. Takada et al., which is drawn to ink jet ink, disclose the equivalence and interchangeability between ethylene glycol, as disclosed by EP 851005, and acetylene alcohol as presently claimed wherein the motivation for using such solvents is to prevent ink from drying.

Applicants argue that Takada et al. is not applicable against the present claims given that Takada et al. distinguish between water-soluble solvents (col.10, lines 14-39) and additives for imparting desirable properties (col.10, lines 61-67) and that ethylene glycol and acetylene alcohol are additives for preventing drying of the ink. Applicants argue that Takada et al. do not show any interchangeability of ethylene glycol and acetylene alcohol for use as water-soluble solvents and thus does not provide motivation to use acetylene alcohol as main solvent (wetting agent) in EP 851005.

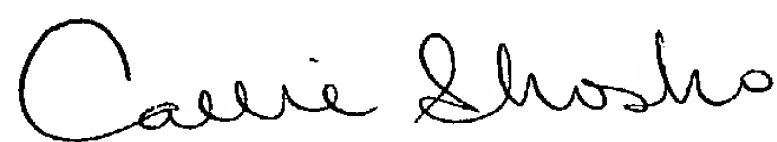
However, it is noted that page 7, lines 36-40 of EP 851005 discloses that a water-soluble organic solvent is used in the pigment dispersion for the purpose of preventing undesirable

drying and that the solvent includes ethylene glycol. Takada et al. disclose ink jet ink comprising aqueous medium comprising mixture of water and water-soluble organic solvent. Takada et al. discloses that those water-soluble organic solvents particularly preferred are those capable of preventing drying of the ink (col.10, lines 16-18). It is noted that this is the same motivation for using water-soluble organic solvent as disclosed by EP 851005. Takada et al. further disclose that the aqueous medium of the ink preferably contains ethylene glycol and acetylene alcohol (col.10, lines 61-65). Thus, it is the examiner's position that Takada et al. do not distinguish between water-soluble organic solvent and additive for preventing drying. Rather, Takada et al. disclose water-soluble organic solvent suitable for use in aqueous medium of ink jet ink and then further disclose specific types of water-soluble organic solvents including ethylene glycol and acetylene glycol that impart desirable properties to the inks such as drying. Given that Takada et al. disclose that the motivation for using solvents such as ethylene glycol and acetylene alcohol is to prevent drying of the ink which is identical to the motivation for using water-soluble organic solvent such as ethylene glycol disclosed by EP 851005, it is the examiner's position that Takada et al. do disclose the equivalence and interchangeability between ethylene glycol and acetylene alcohol and thus, there would be proper motivation to combine EP 851005 with Takada et al.

It is noted that if the amendment were entered, the claim objection and 35 USC 112 rejection of record would be overcome. Further, claims 37-38 would be objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims given that there is no disclosure or suggestion in the "closest" prior art EP 851005 or Takada et al. of (C₄-C₁₀ alkyl) diol wetting agent. Further, claims 39-67 would be allowable over the "closest" prior art given

Art Unit: 1714

that there is no disclosure or suggestion in EP 851005 or Takada et al. that the ink comprises vinyl polymer obtained from (a) silicon macromer or (meth)acrylamide, (b) polymerizable unsaturated monomer having salt-producing group, and (c) monomer copolymerizable with (a) and (b) as required in these claims.



Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
9/22/04